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| 10/777,983 | 02/13/2004 | Hidetaka Mizumaki | 12480-000035/US | 8228 |

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EXAMINER

SUN, XIUQIN

ART UNIT

PAPER NUMBER

2863

DATE MAILED: 02/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/777,983

Applicant(s)

MIZUMAKI, HIDETAKA

Examiner

Xiuqin Sun

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12, 16, 20 and 26-37 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-10, 12, 16, 20, 26, 29, 32 and 35 is/are rejected.
7) ☒ Claim(s) 27, 28, 30, 31, 33, 34, 36 and 37 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 13 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. Applicant is advised that a corrected Abstract proposed in previous Office Action has not been received yet.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 9, 10, 12, 16, 20, 26, 29, 32 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over James (U.S. Pub. No. 4700188) in view of Hayashi et al. (U.S. Pub. No. 20030004659).

Regarding claims 1 and 12:

James teach a method of managing electric power generators, a computer program causing a computer to implement the method, comprising the steps of: (a) a managing device transmitting, via the power network to either an electric power generator to be managed or an electric-power-generator-end communications device connected to an electric power generator to be managed, a request for a transmission of generated power quantity information for the electric power generator, the generated power quantity information being an information indicative of a power quantity which has

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been generated in the electric power generator (col. 5, lines 50-57; col. 6, lines 14-37 and lines 56-65); (b) either the electric power generator or the communications device transmitting the generated power quantity information indicating a generated power quantity for the electric power generator back to the managing device in response to the request (col. 6, lines 14-37 and lines 56-65); and (d) the managing device deciding a timing to transmit a request information for a transmission of generated power quantity for the electric power generators so that timings of transmitting the generated power quantity information disperse to avoid crowdedness of communication due to transmission of the generated power quantity information from the plural electric power generators (col. 6, lines 14-27 and lines 60-68).

James does not mention expressly: said transmitting is via the Internet; and (c) the managing device storing the generated power quantity information into a database in association with the electric power generator which transmitted back the generated power quantity information or the electric power generator to which is connected the communications device which transmitted back the generated power quantity information.

Hayashi et al. disclose a power generation management system, and teach: transmitting power generation related information between a managing device and a power generator to be managed via the Internet (sections 0049-0051 and 0054); and (c) the managing device storing the generated power quantity information into a database in association with the electric power generator which transmitted back the generated power quantity information or the electric power generator to which is connected the

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communications device which transmitted back the generated power quantity information (sections 0050, 0051 and 0054).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Hayashi et al. into the invention of James in order to provide better mechanisms for secure exchange of the power generation information between the server and the client, and for efficient management of the power generation information at the server side (Hayashi, sections 0049 and 0050).

Regarding claim 2:

James does not mention expressly: (e) the managing device determining whether the electric power generator corresponding to the generated power quantity information stored in step (c) is broken or suffering a reduction in power generation capability on the basis of the generated power quantity information.

The teaching of Hayashi et al. further includes: the managing device determining whether the electric power generator corresponding to the generated power quantity information stored in step (c) is broken or suffering a reduction in power generation capability on the basis of the generated power quantity information (section 0112).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Hayashi et al. into the invention of James in order to provide a mechanisms for evaluating the power generation information and better controlling the operation of the power generation (Hayashi, section 0112).

Regarding claims 9 and 10:

The teaching of James further includes: in step (b), the electric power generator or the communications device transmits back identification information by which the electric power generator corresponding to generated power quantity information is identified, together with the generated power quantity information (col. 6, lines 16-27); the generated power quantity information includes generated power quantity information for individual modules constituting the electric power generator (col. 6, lines 28-37).

Regarding claims 16 and 20:

James teach a computer program causing a computer in an electric power generator to execute the steps of: (o) receiving a request for a transmission addressed to the electric power generator and/or the communication device via the power network from a managing device having timing decision means for deciding timings to transmit a request for a transmission of generated power quantity information for electric power generators to be managed so that timings of transmitting the generated power quantity information disperse to avoid crowdedness of communication due to transmission of the generated power quantity information from the plural electric power generators (col. 6, lines 14-27 and lines 60-68; cols. 10-11, lines 47-13); and (p) transmitting generated power quantity information indicating a generated power quantity which has been generated in the electric power generator back to the managing device in response to the request (col. 6, lines 14-27 and lines 60-68; cols. 10-11, lines 47-13).

James does not mention expressly: said transmitting is via the Internet.

Hayashi et al. disclose a power generation management system, and teach: transmitting power generation related information between a managing device and a power generator to be managed via the Internet (sections 0049-0051 and 0054).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Hayashi et al. into the invention of James in order to provide better mechanisms for secure exchange of the power generation information between the server and the client (Hayashi, sections 0049 and 0050).

Regarding claims 26, 29, 32 and 35:

The teaching of James further includes: wherein the managing device transmits one request for a transmission of generated power quantity information to a predetermined number of one group of the electric power generators (col. 6, lines 37-45) and waits for a predetermined period of time before transmitting another request for a transmission of generated power quantity information to a predetermined number of another group of the electric power generators (cols. 3-4, lines 63-9) so that the number of the electric power generators which receive the request for transmission of the generated power quantity information does not exceed a predetermined value (col. 6, lines 37-45).

4. Claims 3-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over James in view of Hayashi et al., as applied to claims 1 above, and further in view of Tonomura et al. (U.S. Pub. No. 20020033020).

James and Hayashi et al. teach the method that includes the subject matter discussed above. James and Hayashi et al. do not mention expressly: regarding claim 3, the electric power generator is a solar cell; and step (c) includes the step of (f) obtaining weather information indicating weather at a location of the electric power generator to store the weather information into the database, together with the generated power quantity information for the electric power generator; regarding claim 4, in step (b), the electric power generator or the communications device transmits back weather information at a location of the electric power generator together with the generated power quantity information; and in step (f), the managing device stores the weather information transmitted back; regarding claim 5 comprising the step of (g) the managing device predicting a generated power quantity for the electric power generator corresponding to the weather information stored in step (c) on the basis of the weather information; regarding claim 6, comprising the step of (h) the managing device determining whether the electric power generator corresponding to the generated power quantity information stored in step (c) is broken or suffering a reduction in power generation capability on the basis of the generated power quantity information and the generated power quantity as predicted in step (g); regarding claim 7, the electric power generator is a solar cell, the method further comprising the steps of: (i) the managing device obtaining location information indicating locations of electric power generators to be managed to divide the electric power generators into groups according the location information, each group consisting of those generators located at the same location; and (j) the managing device comparing the generated power quantity information,

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stored in step (c), for those electric power generators divided into the same group in step (i) in order to determine whether any of the electric power generators is broken or suffering a reduction in power generation capability; regarding claim 8, wherein in step (b), the electric power generator or the communications device transmits back location information at a location of the electric power generator together with the generated power quantity information.

Tonomura et al. disclose a solar power generation administration system and method, including the following teachings: regarding claim 3, the electric power generator is a solar cell (section 0064); and step (c) includes the step of (f) obtaining weather information indicating weather at a location of the electric power generator to store the weather information into the database, together with the generated power quantity information for the electric power generator (sections 0064, 68 and 0073); regarding claim 4, in step (b), the electric power generator or the communications device transmits back weather information at a location of the electric power generator together with the generated power quantity information (sections 0064, 68 and 0073); and in step (f), the managing device stores the weather information transmitted back (sections 0064, 68 and 0073); regarding claim 5, (g) the managing device predicting a generated power quantity for the electric power generator corresponding to the weather information stored in step (c) on the basis of the weather information (section 0159); regarding claim 6, (h) the managing device determining whether the electric power generator corresponding to the generated power quantity information stored in step (c) is broken or suffering a reduction in power generation capability on the basis of the

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generated power quantity information and the generated power quantity as predicted in step (g) (section 0159); regarding claim 7, the electric power generator is a solar cell (section 0064), and the method further comprising the steps of: (i) the managing device obtaining location information indicating locations of electric power generators to be managed to divide the electric power generators into groups according the location information, each group consisting of those generators located at the same location (section 0064); and (j) the managing device comparing the generated power quantity information, stored in step (c), for those electric power generators divided into the same group in step (i) in order to determine whether any of the electric power generators is broken or suffering a reduction in power generation capability (sections 0064, 67 and 0101); regarding claim 8, wherein in step (b), the electric power generator or the communications device transmits back location information at a location of the electric power generator together with the generated power quantity information (section 0064); regarding claim 9, wherein in step (b), the electric power generator or the communications device transmits back identification information by which the electric power generator corresponding generated power quantity information is identified, together with the generated power quantity information (section 0049); regarding claim 10, the generated power quantity information includes generated power quantity information for individual modules constituting the electric power generator (section 0049).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Tonomura et al. into the

combination of James and Hayashi et al. in order to provide a solar power generation management server and solar power generation administration method that can detect and notify the user an error in a solar power generator (Tonomura et al., sections 0012 and 0013).

Allowable Subject Matter

5. Claims 27, 28, 30, 31, 33, 34, 36 and 37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Reasons for Allowance

6. The following is an examiner's statement of reasons for allowance:

The primary reason for the allowance of claims 27, 30, 33 and 36 is the inclusion of the limitation that the managing device delays transmission of the request for transmission of the generated power quantity information if workload due to the request exceeds a predetermined value. It is this limitation found in each of the claims, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

The primary reason for the allowance of claims 28, 31, 34 and 37 is the inclusion of the limitation that the managing device transmits the request for transmission of the generated power quantity information with avoiding a time period specified in advance as heavy workload due to the request exceeds a predetermined value. It is this

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limitation found in each of the claims, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Response to Arguments

8. Applicant's arguments received 12/02/05 with respect to claims 1-10, 12, 16, 20 and 26-37 have been considered but are moot in view of the new ground(s) of rejection.

Claims 1-10, 12, 16, 20, 26, 29, 32 and 35 are rejected as new prior art reference (U.S. Pub. No. 4700188 to James) has been found to teach the limitation of argued by the applicant. Detailed response is given in section 2 as set forth above in this Office Action.

Prior Art Citations

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1) Lof et al. (U.S. Pub. No. 2005/0127680 A1) is directed to a system, method and computer program product that relates to a renewable power production facility that produces electrical power that is applied to a power grid.

2) Kusaka et al. (U.S. Pub. No. 2003/0033056 A1) is entitled to "Power generation plant remote operation system".

3) Lapinski et al. (U.S. Pat. No. 6771058 B2) is entitled to "Apparatus and method for the measurement and monitoring of electrical power generation and transmission".

4) Iwai et al. (U.S. Pub. No. 2003/0009347 A1) is entitled to "Method and system for surveillance and operation services of power generating equipment".

5) Wobben (U.S. Pub. No. 2004/0236538 A1) is entitled to "System for monitoring wind power plants".

6) Nagafuchi et al. (U.S. Pub. No. 20040254684) is entitled "Power plant operation control system and a power plant maintaining and managing method".

Contact Information

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xiuqin Sun whose telephone number is (571)272-2280. The examiner can normally be reached on 6:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571)272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Xiuqin Sun
Examiner
Art Unit 2863

Application/Control Number: 10/777,983

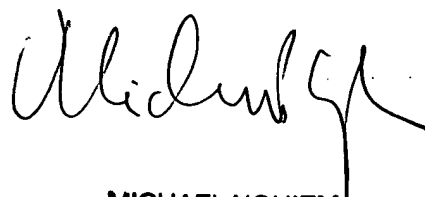
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February 6, 2006

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MICHAEL NGHIEM
PRIMARY EXAMINER